

# CALIFORNIA STATE BOARD OF HEALTH

## MONTHLY BULLETIN

---

Vol. 8

SEPTEMBER, 1912

No. 3

---

### CONTENTS

1. COMMENTS.	PAGE.
School Begins Again.....	27
Nature's Job.....	27
Dissemination of Knowledge and Other Things.....	27
Why the State Board of Health Endorses Health Inspection in the Schools.....	28
Free Health.....	28
Deaths from Measles, Scarlet Fever, Whooping-Cough, and Diphtheria....	29
2. DEPARTMENT REPORTS.	
Bureau of Administration.....	32
Bureau of Vital Statistics.....	33
Bureau of the Hygienic Laboratory.....	38
Bureau of Pure Food and Drug Laboratory.....	41
Bureau of Publications and Health Information.....	40

---

Published by the California State Board of Health, Sacramento.  
Entered as second class matter, August 15, 1905, at the post office at Sacramento,  
California, under the Act of Congress of July 16, 1894.

---

FRIEND WM. RICHARDSON, SUPERINTENDENT OF STATE PRINTING  
SACRAMENTO, CALIFORNIA  
1912



# THE CALIFORNIA STATE BOARD OF HEALTH.

## MEMBERSHIP OF THE BOARD.

MARTIN REGENSBURGER, M.D., <i>President</i>	San Francisco.
W. LE MOYNE WILLS, M.D., <i>Vice-President</i>	Los Angeles.
WILLIAM F. SNOW, M.D., <i>Secretary and Executive Officer</i>	Sacramento.
F. K. AINSWORTH, M.D.	San Francisco.
WALLACE A. BRIGGS, M.D.	Sacramento.
JAMES H. PARKINSON, M.D.	Sacramento.
O. STANSBURY, M.D.	Chico.

## ADMINISTRATIVE ORGANIZATION.

### 1. Bureau of Administration.

JOHN F. LEINEN, Director and Assistant to the Secretary.

Divisions: Executive Division; Legal Division; Division of Morbidity Returns; Division of Sewage Disposal and Water Supplies.

### 2. Bureau of Vital Statistics.

GEORGE D. LESLIE, PH.B., Director and Statistician.

Divisions: Reports; Official Records; Statistics.

### 3. Bureau of the Hygienic Laboratory.

WILBUR A. SAWYER, M.D., Director.

Divisions: Biological Examinations; Preventive Therapeutics; Epidemiological Investigations.

### 4. Bureau of Foods and Drugs.

MYER E. JAFFA, M.S., Director.

Divisions: Division of Inspections; Division of Laboratory Examinations; Division of Food and Drug Standards.

### 5. Bureau of Publications and Health Information.

GUY P. JONES, Acting Director.

Divisions: Division of Publications; Division of Information Correspondence; Division of Demonstrations and Lectures.

## SPECIAL OFFICERS OF THE BOARD.

LOUIS H. ROSEBERRY, A.B.

Attorney for the Board-----Security Savings Bank Building, Los Angeles

CHARLES GILMAN HYDE, C.E.

Consulting Engineer for the Board-----University of California

F. F. GUNDRUM, M.D.

Division Bacteriologist and Field Officer-----Inverness Building, Sacramento

W. W. CROSS, M.D.

Division Bacteriologist and Field Officer-----Patterson Block, Fresno, California

STANLEY P. BLACK, M.D.

Division Bacteriologist and Field Officer-----Auditorium Building, Los Angeles

## REGULAR MEETINGS.

The meetings of the California State Board of Health are held regularly the first Saturday of each month, but the quarterly meetings required by law to be held at the Capitol of the State are ordinarily designated as January, April, July, and October.

By courtesy of the University of California the Food and Drug Laboratory and the Hygienic Laboratory are located in University buildings at Berkeley, California.

Address all communications to the

SECRETARY, Sacramento, Cal.



# SEPTEMBER BULLETIN.

## COMMENTS.

### SCHOOL BEGINS AGAIN.

#### Nature's Job.

By far the most important event of the present month is the opening of the public schools. Approximately 500,000\* young citizens of California, by decree of State law, must be conscripted and marshalled for reënlistment in the yearly battle with books and teaching apparatus. Conscripted!—at least to a large degree this is true. If the schools were conducted solely on the basis of volunteers from the unprodged ranks of our six- to seventeen-year-old citizens, bond issues for school houses would be less frequent. But whether conscripts or volunteers, they are by law and by the advice of their elders enlisted in another year's training for their future life work. It is worth considering the State's sponsibility in this matter.

Consider for a moment Nature's job. These children for the most part have been at play for two or three months—active appetite and muscle-building play. Not a moment of their precious summer has been lost in sitting still. Their days have been days like our ancient ancestors lived; full of yells and fights and feasts and conquests; glorious days in which lungs and muscles and steady nerves were the things that counted. The State steps in and says, "Children, this must stop. The nation no longer needs nimble-witted savages. You must learn to read and write, and do all the other things with your brains which civilization has devised for its own purposes. Go now into the schoolhouse and accept what awaits you there." And what do they accept? Eight months or more of physical inaction from 9 a. m. to 12, and from 1 to 2 or 4 or 5 p. m. Nature's job is to reduce the activities of the army of cells we call the human body, from one to the other of these extremes. This is not an easy task, as any engineer will testify. It is small wonder that the first weeks of each school are marked by "sick headaches," "bilious attacks," and a hundred and one minor disturbances of the body mechanism indicative of interference with the normal physiology of food and exercise and rest. The armies of cells which we call human bodies are the best organized and best disciplined armies in the world, but the job we assign them each year when school begins is an impossible task for a considerable percentage of them.

#### Dissemination of Knowledge—and Other Things.

"A general diffusion of knowledge and intelligence being essential to the preservation of the rights and liberties of the people—," so runs the constitution of the State of California; therefore, we have public schools. The public school is rightly considered the greatest formative influence in the lives of American citizens, but teachers and laymen alike have been singularly blind to the fact that the school disseminates many things besides the knowledge scheduled in the curriculum. War and pestilence are associated throughout all history, because war offers the best opportunity for diseased persons from every

\* This number is an estimate and includes all students, from the kindergarten to the university.



quarter to come together in the closest living conditions with thousands of well persons. It is so with school. Thousands of children assemble annually in the close associations of the schoolhouse and yard. It is inevitable that a child with a communicable disease should have many opportunities to spread it among his mates. If we appreciated the value of good health as we appreciate the value of property, we would maintain in every school department a health inspection service similar in its efficiency to our fire departments. Like a fire department which has to its credit a long list of promptly-extinguished little fires, and is thus rated high in efficiency, so such a health inspection department would be rated high, because of the promptness with which it discovered and "extinguished" a long list of single cases of communicable diseases.

**Why the State Board of Health Endorses Health Inspection in the Schools.**

The State Board of Health is engaged in the business of preventing disease. Health inspection, with adequate "follow-up" systems of application, constitutes the most far-reaching method of preventing disease that has been devised. There are approximately 350,000 families in California. About seventy-five per cent of these families are represented by children attending our schools. It is evident that a thorough system of daily inspection by teachers, medical examiners, and school nurses would make possible a sympathetic, intelligent coöperation among parents, school officers, and health officials. This is not a question of interfering with the individual rights or liberties of children or families. If the State has a right to say that parents must send their children to school, the State has the duty to see that these children are not exposed to disease or to other conditions dangerous to their health. When the parent surrenders his child at the door of the schoolhouse, he should have reasonable assurance that he will not have doctor's bills or funeral expenses to pay as a result of conditions which the school and health authorities of the State can prevent.

The years of childhood below fifteen are especially the years when health inspection should be maintained. The different habits of association after the age of fifteen and the demands for good health in commerce and factories largely tend to reduce the spread of those diseases which are of peculiar danger to children.

The school health inspection movement is a sane, farsighted business proposition which should receive the support of every citizen of the State.

**Free Health.**

The survey of May 13th, 1911, contains an article\* by Frederick Almy, Secretary Buffalo Charity Organization Society, from which the following is quoted: "Free education was once considered radical, but it was followed by compulsory education and with compulsory education illiteracy became extinct among the native born. This free compulsory education was neither charity nor justice, though free schools began as charity. It was protection, for revenue only, for society saw that ignorance was costly and dangerous.

"Free health is now as radical, but it will come, and compulsory health will follow. No child is now allowed to be ignorant, whether its

\* The Survey, Vol. XXVI, No. 7, p. 270.



parents are willing or unwilling; but disease is both more contagious and more dangerous than ignorance. Conversely, health is more precious than knowledge, both to the individual and to the community.

"The tenement father who sees his boy go through the grammar school, and then die of tuberculosis, would rather have a live son than a wise one. The wages of unskilled labor in the tenements do not allow health, but education is given free. Which would any father choose for his child? Which should humanity or policy first give?"

"Public health is quite as important to the community as public education, and we shall at some time have free doctors as well as free teachers, leaving the private doctors, like the private schools, for the few who can afford them and prefer them."

There is food for serious thought in this suggestion, though it is not likely to be the solution for the present unsatisfactory conditions of medical practice. The following article by Mr. George D. Leslie, Director of the Bureau of Vital Statistics, is also full of food for serious thought:

#### DEATHS FROM MEASLES, SCARLET FEVER, WHOOPING-COUGH, AND DIPHTHERIA.

GEORGE D. LESLIE.

The mortality from the children's epidemic diseases—measles, scarlet fever, whooping-cough, and diphtheria—is summarized in the following table for California as a whole in the five-year period, 1907 to 1911:

*Number and Proportion of Deaths from Measles, Scarlet Fever, Whooping-cough, and Diphtheria, with Death Rate per 100,000 Population, for California: 1907 to 1911.*

Year.	Measles.	Scarlet fever.	Whooping-cough.	Diphtheria and croup.
<i>Deaths—State total.</i>				
1911 -----	84	81	177	167
1910 -----	199	69	307	218
1909 -----	119	69	217	248
1908 -----	101	104	149	391
1907 -----	189	72	173	380
<i>Proportion per 1,000 total deaths.</i>				
Annual average: 1907 to 1911 -----	4.4	2.5	6.4	8.9
1911 -----	2.5	2.4	5.2	4.9
1910 -----	6.2	2.1	9.5	6.7
1909 -----	3.8	2.2	7.0	8.0
1908 -----	3.2	3.3	4.8	12.5
1907 -----	6.1	2.3	5.6	12.2
<i>Death rate per 100,000 population.</i>				
Annual average: 1907 to 1911 -----	6.1	3.5	8.8	12.4
1911 -----	3.4	3.3	7.1	6.7
1910 -----	8.3	2.9	12.8	9.1
1909 -----	5.2	3.0	9.4	10.8
1908 -----	4.6	4.7	6.7	17.6
1907 -----	8.9	3.4	8.1	17.9

From the averages for the five-year period it appears that among these children's diseases the mortality was greatest for diphtheria, and next, in descending order, for whooping-cough, measles, and scarlet



fever. Thus, the annual average proportion per 1,000 deaths in 1907 to 1911 was 8.9 for diphtheria and croup, 6.4 for whooping-cough, 4.4 for measles, and 2.5 for scarlet fever. Similarly, the annual average death rate per 100,000 population in this same five-year period was for diphtheria and croup, 12.4; for whooping-cough, 8.8; for measles, 6.1, and for scarlet fever, 3.5.

Reference to the number of deaths shows that the mortality from diphtheria decreased steadily in 1907 to 1911, the successive totals being 380, 391, 248, 218, and 167 (1911).

The deaths from whooping-cough, however, after falling from 173 for 1907 to 149 for 1908 rose to 217 for 1909 and 307 (the maximum) for 1910, falling back then greatly to only 177 for 1911.

The deaths from measles, similarly, fell from 189 in 1907 to 101 in 1908, and then rose to 119 for 1909 and 199 (the maximum) in 1910, falling off again sharply to a minimum of 84 in 1911.

The deaths from scarlet fever likewise varied somewhat in the five years, rising from 72 for 1907 to 104 (the maximum) for 1908, and falling to only 69 for both 1909 and 1910, while rising again to 81 for 1911.

Figures similar to those presented for California in 1907 to 1911 are available also for freeholders' charter cities in contrast with the rest of the State in the four-year period, 1908 to 1911, being summarized in the following table:

*Number and Proportion of Deaths from Measles, Scarlet Fever, Whooping-cough, and Diphtheria, for Cities and Rest of State: 1908 to 1911.*

Year.	Freeholders' charter cities.				Rest of State.			
	Measles.	Scarlet fever.	Whooping-cough.	Diphtheria and croup.	Measles.	Scarlet fever.	Whooping-cough.	Diphtheria and croup.
Deaths—								
1911 -----	65	33	85	92	19	48	92	75
1910 -----	107	39	148	124	92	30	159	94
1909 -----	71	47	133	129	48	22	84	119
1908 -----	54	35	71	207	47	69	78	184
Proportion per 1,000 total deaths.								
• Annual average: 1908 to 1911----	4.1	1.6	6.0	7.6	3.8	3.1	7.5	8.6
1911 -----	3.3	1.7	4.3	4.6	1.4	3.4	6.6	5.4
1910 -----	5.7	2.1	7.9	6.6	6.7	2.2	11.6	6.8
1909 -----	4.1	2.7	7.6	7.4	3.5	1.6	6.2	8.8
1908 -----	3.1	2.0	4.1	11.8	3.4	5.0	5.6	13.3

This table shows that in general there are relatively more deaths from the children's epidemic diseases in the rural districts of California than in freeholders' charter cities as a class. The annual average proportion per 1,000 total deaths in 1908 to 1911 for diphtheria and croup was 8.6 in rural districts against 7.6 in charter cities; for whooping-cough was 7.5 in rural districts against 6.0 in urban territory; and for scarlet fever was 3.1 outside cities against only 1.6 within them. The apparent exception for measles, with the average proportion only 3.8 in rural districts as compared with 4.1 in chartered cities, is due to the exceptionally low mortality for rural districts in 1911.

Comparison of individual cities is best made by reference to the



figures for 1911, the last year covered by available statistics, as given in the table which follows:

*Number and Proportion of Deaths from Measles, Scarlet Fever, Whooping-cough, and Diphtheria, for Individual Cities and Rest of State: 1911.*

City.	Deaths: 1911.	Measles -----	Scarlet fever --	Whooping- cough-----	Diphtheria and croup-----	Proportion per 1,000 total deaths			
						Measles -----	Scarlet fever-----	Whooping- cough-----	Diphtheria and croup
CALIFORNIA-----	34,012	84	81	177	167	2.5	2.4	5.2	4.9
29 Freeholders' charter cities -----	20,005	65	33	85	92	3.3	1.7	4.3	4.6
<i>Northern California.</i>									
Eureka -----	211	-----	1	-----	1	-----	4.7	-----	4.7
Napa -----	86	-----	-----	-----	-----	-----	-----	-----	-----
Petaluma -----	92	-----	-----	2	-----	-----	-----	21.7	-----
Santa Rosa -----	131	-----	-----	-----	-----	-----	-----	-----	-----
Grass Valley -----	63	-----	1	1	-----	-----	15.9	15.9	-----
<i>Central California.</i>									
San Francisco -----	6,496	32	15	31	21	4.9	2.3	4.8	3.2
Alameda -----	265	1	-----	1	2	3.8	-----	3.8	7.5
Berkeley -----	375	-----	-----	2	-----	-----	-----	5.3	-----
Oakland -----	1,984	18	2	7	11	9.1	1.0	3.5	5.5
Richmond -----	118	-----	-----	-----	3	-----	-----	-----	25.4
Monterey -----	59	-----	-----	1	-----	-----	-----	17.0	-----
Salinas -----	52	-----	-----	1	1	-----	-----	19.2	19.2
Palo Alto -----	45	-----	-----	-----	1	-----	-----	-----	22.2
San Jose -----	413	-----	1	-----	-----	-----	2.4	-----	-----
Santa Cruz -----	176	-----	-----	2	-----	-----	-----	11.4	-----
Watsonville -----	70	-----	-----	-----	-----	-----	-----	-----	-----
Fresno -----	354	2	-----	1	11	5.6	-----	2.8	31.1
Sacramento -----	828	2	-----	4	4	2.4	-----	4.8	4.8
Stockton -----	487	-----	1	3	2	-----	2.1	6.2	4.1
Vallejo -----	137	-----	-----	2	1	-----	-----	14.6	7.3
<i>Southern California.</i>									
Los Angeles -----	5,000	8	8	20	22	1.6	1.6	4.0	4.4
Long Beach -----	300	1	1	2	2	3.3	3.3	6.7	6.7
Pasadena -----	429	-----	-----	1	3	-----	-----	2.3	7.0
Pomona -----	152	-----	-----	-----	-----	-----	-----	-----	-----
Santa Monica -----	124	-----	-----	-----	-----	-----	-----	-----	-----
Riverside -----	260	-----	1	4	1	-----	3.9	15.4	3.8
San Bernardino -----	266	-----	-----	-----	2	-----	-----	-----	7.5
San Diego -----	817	1	2	-----	4	1.2	2.4	-----	4.9
Santa Barbara -----	215	-----	-----	-----	-----	-----	-----	-----	-----
Rest of State-----	14,007	19	48	92	75	1.4	3.4	6.6	5.4

The proportion of deaths from diphtheria was above the 1911 city average, 4.6 per 1,000, for thirteen cities, as follows: Fresno, 31.1; Richmond, 25.4; Palo Alto, 22.2; Salinas, 19.2; Alameda and San Bernardino, each 7.5; Vallejo, 7.3; Pasadena, 7.0; Long Beach, 6.7; Oakland, 5.5; San Diego, 4.9; Sacramento, 4.8; and Eureka, 4.7.

The proportion for whooping-cough exceeded the city average, 4.3 per 1,000, in twelve cities, as follows: Petaluma, 21.7; Salinas, 19.2; Monterey, 17.0; Grass Valley, 15.9; Riverside, 15.4; Vallejo, 14.6; Santa Cruz, 11.4; Long Beach, 6.7; Stockton, 6.2; Berkeley, 5.3; and Sacramento and San Francisco, each 4.8.

The proportion for measles equaled or exceeded the city average of 3.3 per 1,000 in the following five cities: Oakland, 9.1; Fresno, 5.6; San Francisco, 4.9; Alameda, 3.8; and Long Beach, 3.3.



The proportion for scarlet fever surpassed the city average of 1.7 per 1,000 in the following eight cities: Grass Valley, 15.9; Eureka, 4.7; Riverside, 3.9; Long Beach, 3.3; San Diego and San José, each 2.4; San Francisco, 2.3; and Stockton, 2.1.

The preceding table also shows that in Napa, Santa Rosa, Watsonville, Pomona, Santa Monica, and Santa Barbara in 1911 there were no deaths at all from any of the children's epidemic diseases—measles, scarlet fever, whooping-cough, and diphtheria. Certain other cities reported deaths from only one of these four diseases, namely: Petaluma, 2 deaths from whooping-cough; Berkeley, 2 deaths from whooping-cough; Richmond, 3 deaths from diphtheria and croup; Monterey, 1 death from whooping-cough; Palo Alto, 1 death from diphtheria; San José, 1 death from scarlet fever; Santa Cruz, 2 deaths from whooping-cough; and San Bernardino, 2 deaths from diphtheria.

## REPORT OF BUREAU OF ADMINISTRATION FOR AUGUST, 1912.

JOHN F. LEINEN, Director.

### Executive Division.

The following tabulation of routine work of the bureau is submitted:

Items.	Total.	No. of subjects.	Admin- trative.	Morbidity.	Inter- bureau.	Miscel- laneous.
Letters received -----	2,310	180	720	600	390	600
Letters sent -----	2,270	176	645	680	520	425
Circular letters sent -----	865	2	540	325	-----	-----
Report blanks sent -----	1,830	9	150	1,520	160	-----
Reports received -----	1,427	12	142	1,025	260	-----
Press clippings, bulletins and newspapers received -----	1,920	45	200	1,120	600	-----
Accounts audited -----	152	-----	22	-----	130	-----
Estimates, approved, items -----	165	-----	25	-----	140	-----
Checks issued -----	121	-----	18	-----	103	-----
General orders issued -----	26	-----	10	-----	16	-----
Miscellaneous letters advising local health officers and com- munities -----	154	25	35	82	37	-----

### Division of Morbidity Returns.

#### Morbidity Report for August, 1912.

Disease.	Cases.	Places.
Poliomyelitis -----	125	29
Smallpox -----	69	12
Typhoid -----	231	43
Diphtheria -----	62	19
Scarlet Fever -----	56	20
Whooping-cough -----	34	10
Pneumonia -----	34	5
Tuberculosis -----	159	11
Chickenpox -----	16	7
Gonorrhœa -----	8	5
Syphilis -----	1	1
Mumps -----	37	10
Measles -----	44	11
Malaria -----	59	7
Erysipelas -----	5	3
Glanders -----	5	1
Hookworm -----	1	1
Scabies -----	1	1
Cerebro spinal meningitis -----	1	1
Totals -----	948	197



**REPORT OF BUREAU OF VITAL STATISTICS.**

GEORGE D. LESLIE, Director.

Work has been continued on the biennial report for 1910-11 in addition to the usual work of the bureau's staff.

**August Statistical Tables.**

The statistical summaries for the Vital Statistics of Records of August, 1912, will be found in the Bulletin for October; the statistics for the current month, September, can not be collected and tabulated for printing before the November issue, and will be in that number of this Bulletin.

**Statistical Summaries for July, 1912.**

*State Totals and Annual Rates.*—The following table shows for California as a whole the birth, death, and marriage totals for the current and preceding months in comparison with those for the corresponding months of last year, as well as the annual rates per 1,000 population represented by the totals for the current and preceding months. The rates are based on an estimated midyear population of 2,579,874 for California in 1912, the estimate having been made by the Census Bureau method with slight modifications.

*Birth, Death and Marriage Totals, with Annual Rates per 1,000 Population for Current and Preceding Months for California: July.*

Month.	Monthly total.		Annual rate per 1,000 population: 1912.
	1912.	1911.	
July—			
Births -----	3,366	3,003	15.4
Deaths -----	2,982	2,591	13.6
Marriages -----	2,786	2,365	12.8
June—			
Births -----	3,309	2,986	15.6
Deaths -----	2,794	2,604	13.2
Marriages -----	3,079	2,976	14.6

The birth, death and marriage totals for July, as for preceding months, were much greater in 1912 than in 1911. The birth registration has been much greater each month this year than in the corresponding month of last year.

*County Totals.*—The first of the following tables shows the monthly birth, death, and marriage totals for the principal counties of the State, the list being limited to counties having a population of at least 25,000 according to the Federal Census of 1910. Totals are also shown for San Francisco and the other bay counties (Alameda, Contra Costa, Marin, and San Mateo), as well as for Los Angeles and Orange counties together.

*City Totals.*—The second table which follows gives the birth and death totals for the principal freeholders' charter cities, the list including all chartered cities with a census population of at least 15,000 in 1910. Totals are given likewise for San Francisco in comparison with Oakland, Alameda, and Berkeley, the three cities adjoining one another on the east shore of San Francisco Bay, as well as for Los Angeles in comparison with neighboring chartered cities (Long Beach, Pasadena, Pomona, and Santa Monica).



*Birth, Death and Marriage Totals, for Principal Counties: July.*

County.	July, 1912.		
	Births.	Deaths.	Marriages.
California -----	3,366	2,982	2,786
Counties of more than 25,000 population (1910):			
Alameda -----	379	273	244
Butte -----	37	29	18
Contra Costa -----	46	16	20
Fresno -----	167	93	79
Humboldt -----	28	34	29
Kern -----	39	43	28
Los Angeles -----	919	749	610
Marin -----	23	9	155
Orange -----	39	61	105
Riverside -----	44	30	28
Sacramento -----	104	119	108
San Bernardino -----	77	89	63
San Diego -----	72	95	118
San Francisco -----	592	533	600
San Joaquin -----	57	97	59
San Mateo -----	42	18	37
Santa Barbara -----	25	30	31
Santa Clara -----	118	129	77
Santa Cruz -----	28	41	32
Solano -----	30	27	10
Sonoma -----	34	46	34
Tulare -----	43	23	32
Selected groups:			
San Francisco and other bay counties -----	1,082	849	1,056
Los Angeles and Orange counties -----	958	810	715

*Birth and Death Totals, for Principal Cities: July.*

City.	July, 1912.	
	Births.	Deaths.
Freeholders' charter cities -----	2,148	1,840
Cities of more than 15,000 population (1910):		
Alameda -----	36	25
Berkeley -----	56	30
Fresno -----	65	40
Long Beach -----	33	28
Los Angeles -----	613	505
Oakland -----	256	176
Pasadena -----	55	37
Riverside -----	27	14
Sacramento -----	85	96
San Diego -----	42	73
San Francisco -----	592	533
San Jose -----	43	55
Stockton -----	26	44
Selected groups:		
San Francisco -----	592	533
Oakland, Alameda and Berkeley -----	348	221
Total, Bay cities -----	940	754
Los Angeles -----	613	505
Neighboring cities -----	112	91
Totals -----	725	596



*Causes of Death.*—The following table shows the classification of deaths in California for the current month, in comparison with the preceding month:

*Deaths from Certain Principal Causes with Proportion per 1,000 Total Deaths for Current and Preceding Months, for California: July.*

Cause of death.	Deaths: July.	Proportion per 1,000.	
		July.	June.
ALL CAUSES-----	2,982	1,000.0	1,000.0
Typhoid fever -----	55	18.4	13.6
Malarial fever -----	11	3.7	3.2
Smallpox -----	4	1.3	-----
Measles -----	12	4.0	5.0
Scarlet fever -----	1	0.3	0.4
Whooping-cough -----	33	11.1	9.7
Diphtheria and croup-----	11	3.7	2.9
Influenza -----	2	0.7	1.1
Other epidemic diseases-----	25	8.4	6.5
Tuberculosis of lungs-----	313	105.0	107.7
Tuberculosis of other organs-----	61	20.5	24.7
Cancer -----	195	65.4	69.4
Other general diseases-----	127	42.6	38.3
Meningitis -----	28	9.4	10.4
Other diseases of nervous system-----	268	89.9	83.4
Diseases of circulatory system-----	490	164.3	165.7
Pneumonia and broncho-pneumonia-----	143	48.0	54.0
Other diseases of respiratory system-----	57	19.1	16.8
Diarrhea and enteritis, under 2 years-----	144	48.3	45.5
Diarrhea and enteritis, 2 years and over-----	34	11.4	13.2
Other diseases of digestive system-----	140	46.9	54.8
Bright's disease and nephritis-----	176	59.0	58.7
Childbirth -----	28	9.4	13.2
Diseases of early infancy-----	122	40.9	42.2
Suicide -----	68	22.8	27.9
Other violence -----	295	98.9	82.3
All other causes-----	139	46.6	49.4

In July there were 490 deaths, or 16.4 per cent of all, from diseases of the circulatory system, and 374, or 12.6 per cent, from various forms of tuberculosis. Heart disease thus led tuberculosis greatly, as in preceding months.

Other notable causes of death were: Violence, 363; diseases of the digestive system, 318; diseases of nervous system, 296; diseases of respiratory system, 200; cancer, 195; Bright's disease and nephritis, 176, and epidemic diseases, 154.

The deaths from epidemic diseases were as follows: Typhoid fever, 55; whooping-cough, 33; measles, 12; malarial fever, 11; diphtheria and croup, also 11, and all other epidemic diseases, 32.



The deaths from the three leading epidemic diseases reported for the month were distributed by counties as follows:

Typhoid fever.		Whooping-cough.		Measles.	
Alameda	4	Alameda	2	Alameda	2
Butte	1	Butte	1	Contra Costa	2
Contra Costa	1	Fresno	3	Fresno	2
El Dorado	1	Kern	2	Los Angeles	1
Fresno	5	Los Angeles	16	Santa Clara	2
Glenn	1	Orange	1	Sonoma	1
Imperial	2	Riverside	2	Stanislaus	2
Kern	1	San Diego	2		
Los Angeles	3	San Francisco	1	Total	12
Marin	1	San Luis Obispo	2		
Merced	1	San Mateo	1		
Orange	4				
Riverside	1	Total	33		
Sacramento	7				
San Diego	1				
San Francisco	11				
San Joaquin	1				
Santa Clara	1				
Shasta	1				
Siskiyou	1				
Stanislaus	1				
Trinity	1				
Tulare	2				
Tuolumne	1				
Ventura	1				
Total	55				

*Geographic Divisions.*—The following table presents data for geographic divisions, including the metropolitan area, or San Francisco and the other bay counties (Alameda, Contra Costa, Marin, and San Mateo), in comparison with the rural counties of Northern and Central California:

*Deaths from Main Classes of Diseases, for Geographic Divisions: July.*

Geographic divisions.	Deaths: July.										
	All causes	Epidemic diseases	Tuberculosis (all forms)	Cancer	Diseases of nervous system	Diseases of circulatory system	Diseases of respiratory system	Diseases of digestive system	Bright's disease and nephritis	Violence	All other causes
THE STATE	2,982	154	374	195	296	490	200	318	176	363	416
Northern California	312	13	22	14	27	70	31	15	10	55	55
Coast counties	180	4	10	10	18	46	20	5	7	31	29
Interior counties	132	9	12	4	9	24	11	10	3	24	26
Central California	1,584	88	188	110	131	261	101	188	86	208	223
San Francisco	533	16	66	39	39	100	31	57	38	61	86
Other bay counties	316	17	35	26	26	54	33	30	19	32	44
Coast counties	199	6	30	14	21	40	15	26	8	19	20
Interior counties	536	49	57	31	45	67	22	75	21	96	73
Southern California	1,086	53	164	71	138	159	68	115	80	100	138
Los Angeles	749	37	116	52	99	110	49	69	62	55	100
Other counties	337	16	48	19	39	49	19	46	18	45	38
Northern and Central California	1,896	101	210	124	158	331	132	203	96	263	278
Metropolitan area	849	33	101	65	65	154	64	87	57	93	130
Rural counties	1,047	68	109	59	93	177	68	116	39	170	148



*Sex and Age Periods.*—The proportion of the sexes among the 2,982 decedents in July was: Male, 1,795, or 60.2 per cent, and female, 1,187, or 39.8 per cent.

The following table shows the age distribution by numbers and per cents, of deaths classified by sex:

*Deaths Classified by Sex and Age Periods, with Per Cents by Age Periods, for California: July.*

Age period.	Deaths.			Per cent.		
	Total	Male.	Female.	Total	Male.	Female.
ALL AGES-----	2,982	1,795	1,187	100.0	100.0	100.0
Under 1 year-----	377	219	158	12.6	12.2	13.3
1 to 4 years-----	161	73	88	5.4	4.1	7.4
5 to 14 years-----	94	51	43	3.2	2.8	3.6
15 to 24 years-----	207	138	69	6.9	7.7	5.8
25 to 34 years-----	297	165	132	10.0	9.2	11.1
35 to 44 years-----	325	196	129	10.9	10.9	10.9
45 to 54 years-----	349	231	118	11.7	12.9	10.0
55 to 64 years-----	370	248	122	12.4	13.8	10.3
65 years and over-----	802	474	328	26.9	26.4	27.6

This table shows that relatively more females than males died at under 1 year, 1 to 4 years, and 5 to 14 years, the period of infancy and childhood, as well as at 25 to 34 years, a chance exception, and at 65 years and over, the period of old age.

*Occupations.*—The table below gives, for deaths 15 years and over, the number of men and women for whom some occupation was reported in contrast with those for whom no gainful occupation was shown:

*Deaths, Fifteen Years and Over, Classified by Sex and Occupation, with Per Cents by Sex, for California: July.*

	Deaths.			Per cent male.	Per cent female.
	Total.	Male.	Female.		
15 YEARS AND OVER-----	2,350	1,452	898	61.8	38.2
Occupations reported -----	1,348	1,264	84	93.8	6.2
No gainful occupation-----	1,002	188	814	18.8	81.2

Of the 1,348 decedents for whom occupations were reported the males numbered 1,264, or 93.8 per cent, and the females only 84, or 6.2 per cent.



The following table shows the distribution of male decedents 15 years and over, engaged in the main kinds of occupation:

*Deaths of Males, Fifteen Years and Over, Engaged in Gainful Occupations, Classified by Kinds of Occupations, with Per Cents, for California: July.*

Kind of occupation.	Males 15 years and over.	
	Deaths.	Per cent.
ALL OCCUPATIONS-----	1,264	100.0
Professional -----	73	5.8
Clerical and official-----	87	6.9
Mercantile and trading-----	97	7.7
Public entertainment -----	39	3.1
Personal service, police and military-----	39	3.1
Laboring and servant-----	258	20.4
Manufacturing and mechanical industry-----	238	18.8
Agriculture, transportation and other outdoor-----	428	33.8
All other occupations-----	5	0.4

Of the 1,264 male decedents for whom occupations were reported 428, or 33.8 per cent, were engaged in agriculture, transportation, and other outdoor pursuits; 258, or 20.4 per cent, in laboring and servant work; 238, or 18.8 per cent, in manufacturing and mechanical industry, and altogether 340, or 27.0 per cent, in professional, clerical and official, mercantile and trading, and all other occupations.

## REPORT OF THE BUREAU OF THE HYGIENIC LABORATORY FOR AUGUST.

WILBUR A. SAWYER, M.D., Director.

### Health Officials' Conference.

The Third Annual Conference of State, County and Municipal Health Officials will be held this year in one of the lecture halls of the University of California in Berkeley from September 23d to 28th. The close proximity of the meeting place to the State Food and Drug Laboratory, the State Hygienic Laboratory, the certified dairy of the University of California, the University Infirmary, a large commercial biological laboratory, and the health departments of the cities around San Francisco Bay will permit the delegates to become acquainted with these institutions. The program for the convention is being prepared, and acceptances have already been received from a number of prominent health officials who were asked to read papers or to speak in opening the discussions. The local committee of arrangements consists of the directors of the two laboratories of the State Board of Health, and of a third member from the faculty of the University of California. The committee is striving to make the conference exceedingly interesting and profitable to those who wish to become more efficient through the experiences of others. In addition to the scientific program, which will occupy most of the time of the conference, pilgrimages by automobile are being planned for those wishing to visit local institutions which have a special bearing on public health, and arrangements are being made for a trip by boat to the quarantine and immigration stations on Angel Island.



**Epidemiological Investigations.**

It certainly begins to look as though the public would soon procure for itself protection from some of our well-understood preventable diseases. In the month of August the attention of the State Board of Health was called to three cases of typhoid fever which had possibly been contracted on a large passenger steamer. With the coöperation of the owners, a thorough investigation of the ship, the crew, and the water and food supplies was made by the Director and the Chief Bacteriologist of the Laboratory, both on board the ship while it was in port, and in the Laboratory. The results were exceedingly reassuring, inasmuch as no evidence of typhoid organisms could be discovered either in the water supply or in members of the crew suspected of being carriers, and it seemed probable that the cases leading to the investigation had been contracted away from the ship. As no further cases have developed since the investigation, the conclusions arrived at were probably correct. Health workers who are striving to reduce the mortality and the morbidity in their communities are looking forward to the time when the public will demand immediate investigation of the appearance of typhoid fever anywhere in California with a view to terminating the source of the infection. Placing the blame for one or two cases in many instances would permit the removal of a source of infection which, if uninterrupted, would involve large groups of cases. We Californians need more trained epidemiologists who can hurry to the scene of an outbreak of the disease, and devote all of their time to investigation until the responsibility for the trouble has been discovered and a remedy has been suggested.

**Division of Biological Examinations.***Summary of Examinations Made in the California State Hygienic Laboratory During the Month of August, 1912.*

Condition suspected.	Positive.	Negative.	Inconclusive.	Total.
<b>Main Laboratory at Berkeley:</b>				
Anthrax -----	1	3	-----	4
Diphtheria -----	48	119	-----	167
Gonococcus infection -----	7	10	-----	17
Malaria -----	4	5	-----	9
Rabies -----	13	14	2	29
Tuberculosis -----	3	24	-----	27
Typhoid -----	5	75	-----	80
Water pollution -----	1	5	-----	6
Miscellaneous -----	-----	5	-----	5
				344
<b>Northern Branch at Sacramento:</b>				
Diphtheria -----	-----	2	-----	2
Tuberculosis -----	-----	7	-----	7
Typhoid -----	4	4	-----	8
				17
<b>San Joaquin Valley Branch at Fresno:</b>				
Anthrax -----	-----	-----	1	1
Diphtheria -----	-----	1	1	2
Tuberculosis -----	2	2	-----	4
Typhoid -----	-----	7	-----	7
				14
<b>Southern Branch at Los Angeles:</b>				
Diphtheria -----	2	2	-----	4
Typhoid -----	1	4	-----	5
				9
Total number of examinations -----				384



**Division of Preventive Therapeutics.**

*Pasteur Treatment for the Prevention of Rabies by the State Hygienic Laboratory  
During the Month of August, 1912.*

	Treatment commenced.	Treatment completed.
Main Laboratory at Berkeley.....	2	4
Northern Branch at Sacramento.....		
San Joaquin Valley Branch at Fresno.....	1	2
Southern Branch at Los Angeles.....		
Laboratory of Sacramento Board of Health, by deputized bacteriologist .....	1	1
Laboratory of San Francisco Board of Health, by deputized bacteriologist .....	17	9
Laboratory of Los Angeles Board of Health, by deputized bacteriologist .....	2	1
Laboratory of Letterman General Hospital, Presidio, by deputized bacteriologist .....		1
	23	18

**Public Health Instruction.**

*Participation in Instruction in Public Health During August, 1912.*

Main Laboratory at Berkeley:	
Bacteriological instruction outfits sent out.....	1
Bacteriological instruction outfits in use.....	13
Lectures or talks by the Director.....	0

**Division of Epidemiological Investigations.**

*Epidemiological Investigations During August, 1912.*

Main Laboratory at Berkeley:	
Special investigations by the Director.....	1
Investigation of a large passenger steamer, touching San Francisco, and its crew with regard to the source of infection of three cases of typhoid fever.	

## **REPORT OF BUREAU OF PUBLICATIONS AND HEALTH INFORMATION.**

GUY P. JONES, Acting Director.

The matter of purity in food products is of vital importance to every family, not alone from the standpoint of health, but for economic reasons as well. Cheap adulterants help to increase the size of the hole in the family purse, for if the food value of a product is lowered, a larger quantity of the product must be consumed by the individual to obtain the necessary fuel which his body demands.

For this reason, as well as for the purpose of knowing what is harmful in food and drugs, every family should have a copy of the pure food and drug laws. The intelligent use of this booklet may be the means of reducing household bills and of gaining greater efficiency for each member of the family.

This Bureau has for distribution a large number of these laws, one of which will be sent free of all cost to any person in the State expressing a desire for it. In addition, the booklet contains the Food Sanitation Act, which provides for the maintenance of sanitary conditions in all places where foodstuffs are made.



**REPORT OF BUREAU OF FOODS AND DRUGS FOR  
AUGUST, 1912.**

MYER E. JAFFA, Director.

The following Notices of Judgment have been received since the last issue of the bulletin. Any person wishing copies of these notices may obtain the same by addressing the Director, Bureau Foods and Drugs, University of California, Berkeley, California.

**Notices of Judgment 1242-1354.**

- No. 1242—Adulteration of Tomato Sauce.
- No. 1243—Adulteration and Misbranding of Candy.
- No. 1244—Adulteration of Candy.
- No. 1245—Misbranding of Evaporated Apples.
- No. 1246—Adulteration of Figs.
- No. 1247—Misbranding of "Creme De Cacao"; Adulteration and Misbranding of Blackberry Cordial; Adulteration and Misbranding of Peppermint Extract; Misbranding of "Bernardine"; Adulteration and Misbranding of Blackberry Cordial; Misbranding of "Creme De Cassis"; Misbranding of Champagne; Misbranding of "Orange Curaçao."
- No. 1248—Adulteration and Misbranding of Apricot Brandy; Misbranding of Ginger Brandy.
- No. 1249—Adulteration of Grape Jam.
- No. 1250—Adulteration and Misbranding of White Oats.
- No. 1251—Adulteration of Berry Hill Mineral Water.
- No. 1252—Adulteration and Misbranding of Vinegar.
- No. 1253—Adulteration of Herring.
- No. 1254—Misbranding of Cracked Corn.
- No. 1255—Misbranding of Gin.
- No. 1256—Adulteration and Misbranding of Evaporated Apples.
- No. 1257—Adulteration and Misbranding of Pepper.
- No. 1258—Misbranding of Vinegar.
- No. 1259—Adulteration and Misbranding of Milk and Cream.
- No. 1260—Adulteration of Herring.
- No. 1261—Adulteration of Tomato Pulp.
- No. 1262—Adulteration of Peaches.
- No. 1263—Adulteration of Peanuts.
- No. 1264—Misbranding of Lemon Flavor.
- No. 1265—Alleged Misbranding of Grant's Hygienic Crackers.
- No. 1266—Adulteration and Misbranding of Lemon Extract.
- No. 1267—Adulteration of Tomato Pulp.
- No. 1268—Adulteration of Tomato Pulp.
- No. 1269—Adulteration of Catsup.
- No. 1270—Adulteration of Tomato Pulp.
- No. 1271—Adulteration of Tomato Catsup.
- No. 1272—Misbranding of Beer.
- No. 1273—Misbranding of Little Neck Clams.
- No. 1274—Adulteration of Raisins.
- No. 1275—Adulteration of Black Olives.
- No. 1276—Misbranding of Quince Jam, Peach Jam, Raspberry Jam, Strawberry Jam, Apricot Jam, Jelly Apple Flavor, and Blackberry Jam; Adulteration of Catsup.
- No. 1277—Misbranding of Coderre's Infants' Syrup.
- No. 1278—Misbranding of Macaroni.
- No. 1279—Adulteration of Coffee.
- No. 1280—Misbranding of Peas.
- No. 1281—Adulteration and Misbranding of Extract of Vanilla.
- No. 1282—Misbranding of Gold Medal Coffee Cocktail.
- No. 1283—Misbranding of Grape Juice.
- No. 1284—Adulteration and Misbranding of "Ferro-China Bisleribisleris Bitters"; Misbranding of "Fernet-Branca Bitters."
- No. 1285—Adulteration and Misbranding of Vinegar.
- No. 1286—Adulteration and Misbranding of Coffee.
- No. 1287—Adulteration and Misbranding of Vinegar.
- No. 1288—Alleged Adulteration of Saffron.



- No. 1289—Adulteration of Vanilla Flavor.
- No. 1290—Adulteration of Vinegar.
- No. 1291—Misbranding of a Product Called Drug Habit Cure.
- No. 1292—Adulteration of Vanilla Extract.
- No. 1293—Misbranding of Continental Gluten Feed.
- No. 1294—Misbranding of Continental Gluten Feed.
- No. 1295—Adulteration and Misbranding of Coffee.
- No. 1296—Adulteration of Frozen Eggs.
- No. 1297—Adulteration and Misbranding of Apple Cider Vinegar.
- No. 1298—Adulteration and Misbranding of Vinegar.
- No. 1299—Adulteration of Sardines.
- No. 1300—Adulteration of Dried Egg Albumen.
- No. 1301—Adulteration of Ice Cream Cones.
- No. 1302—Adulteration and Misbranding of Strawberry Preserves.
- No. 1303—Alleged Adulteration and Misbranding of Milk Products.
- No. 1304—Adulteration and Misbranding of Cider Vinegar.
- No. 1305—Misbranding of Olive Oil.
- No. 1306—Alleged Adulteration and Misbranding of Vanilla Tonka and Compound.
- No. 1307—Adulteration of Cream.
- No. 1308—Adulteration and Misbranding of Vinegar.
- No. 1309—Adulteration and Misbranding of Maple Sugar.
- No. 1310—Adulteration of Milk.
- No. 1311—Adulteration of Milk.
- No. 1312—Adulteration of Cream.
- No. 1313—Adulteration of Evaporated Apple Chops.
- No. 1314—Adulteration and Misbranding of Lemon Extract.
- No. 1315—Adulteration of Ice Cream Cones.
- No. 1316—Adulteration of Tomato Catsup.
- No. 1317—Adulteration and Misbranding of Coffee.
- No. 1318—Adulteration of Clams.
- No. 1319—Alleged Misbranding of Mustard.
- No. 1320—Adulteration and Misbranding of "Tomato Puree"; Adulteration of "Tomato Pulp"; Adulteration of "Tomato Catsup".
- No. 1321—Adulteration of Frozen Eggs.
- No. 1322—Misbranding of a Drug Product—"Wood's Soothing Syrup".
- No. 1323—Misbranding of Evaporated Apples.
- No. 1324—Misbranding of Spaghetti and Macaroni.
- No. 1325—Misbranding of Buckwheat Flour.
- No. 1326—Adulteration of Ketchup.
- No. 1327—Misbranding of Maraschino Cherries.
- No. 1328—Adulteration and Misbranding of Corn Meal; Adulteration of Corn Meal.
- No. 1329—Adulteration of Catsup.
- No. 1330—Adulteration of Dried Apples.
- No. 1331—Adulteration of Desiccated Eggs.
- No. 1332—Adulteration and Misbranding of Chocolate.
- No. 1333—Adulteration of Dried Cherries.
- No. 1334—Misbranding of Tomato Catsup.
- No. 1335—Alleged Adulteration of Almond Paste.
- No. 1336—Adulteration of Cheese.
- No. 1337—Adulteration of Oysters.
- No. 1338—Adulteration of Tomato Paste.
- No. 1339—Adulteration and Misbranding of Pink Root.
- No. 1340—Misbranding of Rice.
- No. 1342—Misbranding of Corn Meal.
- No. 1343—Misbranding of Bloaters.
- No. 1344—Misbranding of Cheese.
- No. 1345—Adulteration and Misbranding of Aunt Jemima's Sugar Cream.
- No. 1346—Adulteration of Tomato Ketchup.
- No. 1347—Misbranding of Piccadilly Dry Gin.
- No. 1348—Misbranding of Grape Juice.
- No. 1349—Adulteration and Misbranding of Apple Cider Vinegar.
- No. 1350—Misbranding of German Headache Powder.
- No. 1351—Alleged Misbranding of Candy.
- No. 1352—Adulteration of Catsup.
- No. 1353—Adulteration and Misbranding of Jamaica Ginger Extract.
- No. 1354—Misbranding of Vermouth.